Docket No.: 42478-6200

RESPONSE UNDER 37 CFR SECTION 1.116
EXPEDITED PROCEDURE - GROUP 2857

REMARKS

Applicants acknowledge with appreciation that Claims 1-6 are allowed. Claims 7-29 were previously cancelled. Only Claim 30 was rejected under 35 U.S.C. 102(b) as anticipated by the *McCalley et al.* ("*McCalley*" U.S. Patent No. 5,956,415) reference in the Final Office Action dated June 15, 2004. Claim 30 is amended as described below. Claims 1-6 and 30 remain in the case.

Applicants further acknowledge with appreciation the telephone conferences between Examiner Tsai and Applicant's representatives on September 8 and 9 discussing proposed amendments to Claim 30 as well as distinguishing features of the presently claimed invention and the *McCalley* reference. During the telephone conference of September 9 Examiner Tsai indicated the proposed amendments to Claim 30 have overcome the *McCalley* reference. The following remarks were submitted informally to Examiner Tsai for the telephone conferences and are reproduced below in order to be made of record in this case.

Claim 30, as amended, recites a conductive path having a second portion on an outside layer of the multilayer board that is positioned only under the circuit components. Claim 30 is amended to reflect the previously allowed Claim 1. During the telephone interview today the point was made that accessing such a second portion of the conductive path on the outside layer of the multilayer board, but under a circuit component, would require removal or destruction of a circuit component and render the circuit inoperative. Essentially, there would be nothing of interest to probe on the exposed portion of the conductive path once the component was removed or destroyed since a component of the circuit would be effectively missing.

In the cited reference, *McCalley et al.* ("McCalley" U.S. Patent No. 5,956,415) teach a sensor 30 contained within a secure sensor package 190 including a tamper-resistant housing 191

(McCalley Figure 22 and col. 10 ll. 45-52). It is significant to note that the phrase tamper-resistant is used, rather than the phrase tamper-proof. It is well known that any such measures to secure an item can only be secure against a known attack at the time such measures are adopted. It is always possible to develop a new technology or technique to defeat the established security measures. During the telephone interview the point was made that the tamper-resistant housing 191 is not a part of the circuit itself, and that removal of the tamper-resistant housing 191, even by some unknown mechanism, would not necessarily render the circuit inoperative as it necessarily would for the present invention. Essentially, *McCalley et al.* do not teach that the tamper-resistant housing 191 is a part of the circuit.

McCalley et al. teach the tamper-resistant housing 191 can be constructed of a variety of proposed materials having various properties such as a hard plastic or metal that is strong and resistant to cutting, abrading, or sawing (McCalley col. 10 ll. 52-54). Alternatively, *McCalley et al.* suggest that the tamper-resistant housing 191 can be constructed of an opposite type material such as a delicate material that crumbles and destroys its internal circuit components if cutting, dissolution, or other forms of entry are attempted (McCalley col. 10 ll. 54-57). *McCalley et al.* suggest the memory 198 and/or other circuit components can be made to destruct or empty of sensitive data when the tamper-resistant housing 191 is opened/breached (McCalley col. 12 ll. 51-55). This suggests first that the housing 191 can be breached, and second that an additional security mechanism is added to protect the integrity of possibly sensitive data once the housing is breached. By including this secondary security mechanism, in addition to the tamper-resistant housing 191, *McCalley et al.* teach that the housing 191 is removable in a way that sensitive data can remain vulnerable.

One such secondary security mechanism is the application of a coating 193 that causes destruction of the circuit if the coating is dissolved (McCalley col. 12 ll. 55-58). Another secondary mechanism is utilizing a certain type of memory 198 that is sensitive to light so that if the memory is exposed to light then either the memory would be destroyed or else the information would be erased, effectively emptying the data content of the memory (McCalley col. 58-59). During the telephone conference today the point was made that knowledge of such a secondary security mechanism would motivate a person to perform such a breach of the housing 191 in a dark place so as to avoid destruction of the memory or erasure of the contents of the memory caused by exposure to light. These diverse examples of materials and mechanisms indicate that the type of material of the housing 191 is not significant, but merely the function of providing security against sensitive data being transferred to an unauthorized person, whether or not the circuit itself or data content are destroyed (McCalley col. 12 ll. 60-64).

It is believed that Claim 30, as amended, is allowable based on the allowability of Claim 1 even without the above distinction, but it is provided in order to more clearly explain the different structure and objects taught by the cited reference in contrast to using a circuit component to cover that portion of a conducting path that exists on the outside layer of a multilayer board.

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It is believed that the case is now in condition for allowance, and an early notification of the same is requested. If the Examiner believes that a telephone interview will help further the prosecution of this case, he is respectfully requested to contact the undersigned attorney at the listed telephone number.

I hereby certify that this document is being facsimile transmitted to the United States Patent and Trademark Office at Facsimile No. **703-872-9306** on this 15th day of September, 2004.

By: Joan M. Gordon

Joan M. Gordon
Signature

Dated: September 15, 2004

Very truly yours,

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